

Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-298



C-130 AMP

As of December 31, 2011

Defense Acquisition Management Information Retrieval (DAMIR)

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Program Information

Designation And Nomenclature (Popular Name)

C-130 Avionics Modernization Program (C-130 AMP)

DoD Component

Air Force

Responsible Office

Responsible Office

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References

SAR Baseline (Production Estimate)

Defense Acquisiton Executive (DAE) Approved Acquisition Program Baseline (APB) dated April 18, 2010

Approved APB

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated April 18, 2010

Mission and Description

The C-130 Avionics Modernization Program (AMP) consolidates and installs the mandated Air Force Navigation/Safety modifications, the Communications Navigation Surveillance/Air Traffic Management (CNS/ATM) capabilities, and the C-130 Broad Area Review requirements on 221 of the Air Force's Combat Delivery C-130s. These mandated modifications are incorporated with various other Reliability, Maintainability, and Sustainability upgrades to include: installation of fleet-wide radars, aircrew displays, dual autopilots, dual flight management systems and HF/UHF/VHF radios/data links. AMP will allow this fleet complete access to the CNS/ATM-mandated national and international air space for the foreseeable future.

This fleet consists of three (3) different mission design series (MDS) aircraft to be modified by the AMP (C-130 H2, H2.5, and H3). Within each of these MDSs multiple variants exist among the aircraft that will be modified with AMP. Today, these different models and cockpit configurations create significant logistics support and aircrew training inefficiencies. Also, these differences greatly complicate aircrew and aircraft scheduling and interoperability at forward operating locations. C-130 AMP standardizes the cockpit configurations and avionics suites for these different variants into a single cockpit configuration by installing a core avionics package with a common cockpit layout, thus eliminating many of these significant logistics, interoperability, and training problems.

Executive Summary

The C-130 AMP was canceled in the FY 2013 President's Budget, which results in the program being greater than 90 percent expended and delivered. Therefore, pursuant to section 2432 of Title 10, United State Code, this will be the final SAR for the program. Program cancellation also requires Congressional Nunn-McCurdy notification.

As a result of the cancellation of the C-130 AMP, the Program Acquisition Unit Cost (PAUC) increased 851% and Average Procurement Unit Cost (APUC) increased 292% resulting in a critical Nunn-McCurdy breach.

Dedicated Operational Test and Evaluation (OT&E) Status - C-130 IOT&E has been indefinitely delayed due to pending cancellation.

- Operational Test and Evaluation Certificate signed December 2011; Military Flight Release signed January 2012.
- LRIP 1 (AMP #4) completed installation at Warner-Robins Air Logistics Center and delivered to Little Rock, AFB January 3, 2012; LRIP 2's (AMP #5) estimated delivery is March 2012

Source Familiarization Phase (SFP) source selection process expired December 2011.

There are no software-related issues with the program at this time.

Threshold Breaches

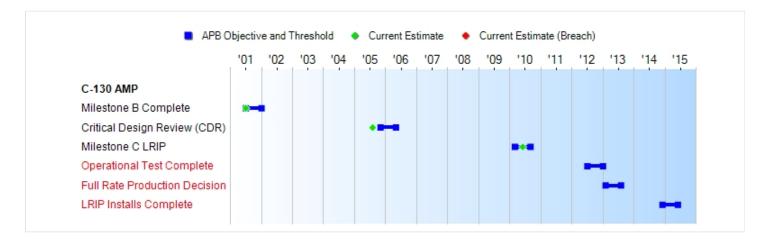
APB Breaches						
Schedule		\checkmark				
Performance						
Cost	RDT&E					
	Procurement	t 🔲				
	MILCON					
	Acq O&M					
Unit Cost	PAUC	V				
	APUC	\checkmark				
Nunn-Mc	Curdy Breach	es				
Current UCR	Baseline					
	PAUC	Critical				
	APUC	Critical				
Original UCR	Baseline					
	PAUC	Critical				
	APUC	Critical				

Explanation of Breach

The Schedule Breach was reported in December 2010 SAR.

The FY 2013 President's Budget canceled C-130 AMP. This results in both PAUC and APUC Unit Cost APB breaches, as well as critical Nunn-McCurdy breaches.

Schedule



Milestones	SAR Baseline Prod Est	Prod	ent APB luction e/Threshold	Current Estimate	
Milestone B Complete	JUL 2001	JUL 2001	JAN 2002	JUL 2001	
Critical Design Review (CDR)	NOV 2005	NOV 2005	MAY 2006	AUG 2005	
Milestone C LRIP	MAR 2010	MAR 2010	SEP 2010	JUN 2010	
Operational Test Complete	JUL 2012	JUL 2012	JAN 2013	N/A ¹	(Ch-1
Full Rate Production Decision	FEB 2013	FEB 2013	AUG 2013	N/A ¹	(Ch-1
LRIP Installs Complete	DEC 2014	DEC 2014	JUN 2015	N/A¹	(Ch-1

¹APB Breach

Change Explanations

(Ch-1) Program cancellation negates the need for Current Estimates for Operational Test Complete, Full Rate Production Decision, and LRIP Installs Complete milestones.

Performance

Characteristics	SAR Baseline Prod Est	Produ	nt APB uction ⁄Threshold	Demonstrated Performance	Current Estimate
CNS/ATM & Nav- Safety Compliance	Meet technical performance based standards for RNP and RNAV airspace IAW 2005 world- wide CNS/ATM standards as they apply to C-130 operations. Comply with Air Force Nav- Safety Master Plan require- ments.	Meet technical performance based standards for RNP and RNAV airspace IAW 2005 world- wide CNS/ATM standards as they apply to C-130 operations. Comply with Air Force Nav- Safety Master Plan require- ments.	Meet technical performance based standards for RNP and RNAV airspace IAW 2005 world- wide CNS/ATM standards as they apply to C-130 operations. Comply with Air Force Nav- Safety Master Plan require- ments.	Navigation system Accuracy Criteria: Cross track and along-track error of <1 nautical miles 95% of the time, meets RNP-1, Basic RNAV, and precision area navigation operations. Result: Parameters met on the ground. Ref: 2 May 08 AFOTEC OA Report	Meet technical performance based standards for RNP and RNAV airspace IAW 2005 world-wide CNS/ATM standards as they apply to C-130 operations. Comply with Air Force Nav-Safety Master Plan require- ments.
Baseline Cockpit Configuration	The cockpit avionics architecture on all combat delivery aircraft shall be optimized to ensure the aircraft can effectively execute current missions throughout the world with a basic cockpit crew of no greater than two pilots and one flight engineer	The cockpit avionics architecture on all combat delivery aircraft shall be optimized to ensure the aircraft can effectively execute current missions throughout the world with a basic cockpit crew of no greater than two pilots and one flight engineer	The cockpit avionics architecture on all combat delivery aircraft shall be optimized to ensure the aircraft can effectively execute current missions throughout the world with a basic cockpit crew of no greater than two pilots and one flight engineer	Percentage of Successful Arrivals Criteria: > or = to 90% of missons meet AMC Instruction 10-202, Vol 6 requirements and applicable AF Instructions. Result: 85% successful. Ref: 2 May 08 AFOTEC OA report. Human factor	The cockpit avionics architecture on all combat delivery aircraft shall be optimized to ensure the aircraft can effectively execute current missions throughout the world with a basic cockpit crew of no greater than two pilots and one flight engineer

	from their respective crew positions.	from their respective crew positions.	from their respective crew positions.	workload assess- ments; Integrated System Evaluation Jul - Aug 09 Boeing final human factors test complete - Aug 09 Final Air Force Flight Test Center Human Factors complete - Dec 09	from their respective crew positions.
Net Ready	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in	The system must fully support execution of joint critical operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for transition to Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs	TBD	The system must fully support execution of all operational activities identified in the applicable joint and system integrated architectures and the system must satisfy the technical requirements for Net-Centric military operations to include 1) DISR mandated GIG IT standards and profiles identified in the TV-1, 2) DISR mandated GIG KIPs identified in

Integrated Defensive	the KIP declaration table, 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views. Use inputs	the KIP declaration table, 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and nonrepudiation, and issuance of an ATO by the DAA and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views. Use inputs	requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an IATO by the DAA and	Initial ground	the KIP declaration table, 3) NCOW RM Enterprise Services 4) Information assurance requirements including availability, integrity, authentication, confidentiality, and non-repudiation, and issuance of an ATO by the DAA and 5) Operationally effective information exchanges; and mission critical performance and information assurance attributes, data correctness, data availability, and consistent data processing specified in the applicable joint and system integrated architecture views. Use inputs
System Situational	from the	from the	from the	and range	from the
Awareness	AAR-47	AAR-47	AAR-47	flight testing	AAR-47

	MWS, ALE- 47 CMDS, and ALR-69 RWR to generate an integrated defensive systems capability that displays proper signal detection, provides appropriate audio tones and advisory messages, triggers the correct automatic dispense responses, and provides a centralized defensive systems resource status.	MWS, ALE-47 CMDS, and ALR-69 RWR to generate an integrated defensive systems capability that displays proper signal detection, provides appropriate audio tones and advisory messages, triggers the correct automatic dispense responses, and provides a centralized defensive systems resource status.	MWS, ALE-47 CMDS, and ALR-69 RWR to generate an integrated defensive systems capability that displays proper signal detection, provides appropriate audio tones and advisory messages, triggers the correct automatic dispense responses, and provides a centralized defensive systems resource status.	completed.	MWS, ALE-47 CMDS, and ALR-69 RWR to generate an integrated defensive systems capability that displays proper signal detection, provides appropriate audio tones and advisory messages, triggers the correct automatic dispense responses, and provides a centralized defensive systems resource status.
Operations in a Chemical/Biological Environment	Aircraft controls and systems modified by AMP shall be operable without degradation or operational constraints in a chemical/ biological environment with aircrew Chemical/ Biological protective clothing	Aircraft controls and systems modified by AMP shall be operable without degradation or operational constraints in a chemical/ biological environment with aircrew Chemical/ Biological protective clothing	Aircraft controls and systems modified by AMP shall be operable without degradation or operational constraints in a chemical/ biological environment with aircrew Chemical/ Biological protective clothing	Chem/Bio gear test accom- plished successfully (per AFOTEC). Ref: 4 December 2008 test on AMP 1 at EAFB.	Aircraft controls and systems modified by AMP shall be operable without degradation or operational constraints in a chemical / biological environment with aircrew Chemical / Biological protective clothing.
Material Availability	AMP NMCAMP rate shall be less than or equal to 2.2	AMP NMCAMP rate shall be less than or equal to 2.2	AMP NMCAMP rate shall be less than or equal to 2.2	AFOTEC assessment exceeds requirement; 1.4%	AMP NMCAMP rate shall be less than or equal to 2.2

	percent for	percent for	percent for	preliminary	percent for
	C-130	C-130	C-130	verification	C-130
	H2/H2.5/ H3	H2/H2.5/ H3	H2/H2.5/ H3	by AFOTEC.	H2/H2.5/H3
	fleet avionics	fleet avionics	fleet avionics		fleet avionics
,	work unit	work unit	work unit		work unit
	codes.	codes.	codes.		codes.

Requirements Source: Capability Production Document (CPD) for C-130 AMP Initial Increment (V 3.1) March 4, 2008 (Joint Requirements Oversight Council Memo 051-08)

Acronyms And Abbreviations

AFI - Air Force Instruction

AFOTEC - Air Force Operational Test & Evaluation Center

AFROCC - Air Force Requirements for Operational Capability Council

AMC - Air Mobility Command

ASACM - Advanced Situational Awareness and Countermeasures

ATO - Approval to Operate

CJCSI - Chairman Joint Chief of Staff Instruction

CMDS - Countermeasures Dispenser System

CNS/ATM - Communications, Navigation Surveillance/Air Traffic Management

CPD - Capabilities Production Document

DAA - Designated Approval Authority

DISR - DOD Information Technology Standards and Profile Registry

EAFB - Edwards Air Force Base

GIG - Global Information Grid

IATO - Interim Approval to Operate

IAW - In Accordance With

IER - Information Exchange Requirement

IP - Internet Protocol

IT - Information Technology

JITC - Joint Interoperability Test Command

JTRS - Joint Tactical Radio System

KIP - Key Interface Profiles

KPP - Key Performance Parameter

NCOW RM - Net Centric Operations and Warfare Reference Model

NMCAMP - Not Mission Capable AMP

OA - Operational Assessment

RNAV - Area Navigation

RNP - Required Navigation Performance

RWR - Radar Warning Receiver

TBD - To Be Determined

USAF - United States Air Force

Change Explanations

None

Memo

OSD (AT&L) Acquisition Decision Memorandum (June 4, 2007) directed restructure of C-130 AMP to modernize C-130H2, C-130H2.5 and C-130H3 Mission Design Series only, eliminating Special Mission aircraft requirements. As a result, Performance Characteristics specifically related to Special Mission requirements have been deleted.

AMC's Capability Production Document (CPD) for C-130 AMP [Capability Production Document for C-130 AMP Initial Increment (V 3.1)], prepared for Milestone C Decision, identifies six Key Performance Parameters (KPPs) essential to mission accomplishment (Ref Table 6.1 in CPD) and are updates to existing KPPs. The existing Acquisition Performance Baseline Performance Characteristics have been deleted and replaced with the six KPPs identified in the CPD.

Time and Accuracy Standards defined in AFI 11-2C-130, Vol 2; cockpits shall meet the requirements of the USAF flight instrumentation endorsement process outlined in AFI 11-202 Vol. III, April 5, 2006.

Net Ready KPP: Defined in CJCSI 6212.01D, March 8, 2006. C-130 AMP will not meet the full intent of the Net-Ready KPP until an IP-enabled radio (e.g. JTRS) is developed, validated and integrated into the architecture. However, 85-90% of the requirement can be met with the AMP design. In addition, the architecture has been designed to accommodate JTRS integration in the future. The incremental approach to satisfying this requirement has been coordinated with JITC, AFOTEC, the Joint Staff, and AMC.

Material Availability KPP: Not Mission Capable rate is calculated for the AMP work unit codes as described in AMC Supplement 1 to AFI 21-101 using the following formula: Not Mission Capable AMP (NMCAMP) is equal to the NMCAMP-Maintenance hours plus NMCAMP-both basic plus maintenance hours plus NMCAMP-supply hours divided by possessed hours times 100. AFOTEC assessment exceeds requirement; 1.4% preliminary verification.

Track To Budget

RDT&E

(Air Force) **APPN 3600 BA 07** PE 0401115F

> Project 4885 Air Force/Avionics (Sunk)

Modernization Program (AMP)

2012 is final year of 3600

(DoD) **APPN 0400** BA 07 PE 0406404D

> Project F100CA DoD (SOF) (Sunk)

2006 was final year of 0400.

Procurement

APPN 3010 BA 05 PE 0401115F (Air Force)

> (Shared) ICN C13000 Air Force (Sunk) ICN C1300A (Sunk)

Air Force

Cost and Funding

Cost Summary

Total Acquisition Cost and Quantity

	В	Y2010 \$M		BY2010 \$M		TY \$M	
Appropriation	SAR Baseline Prod Est	Curren Produc Objective/T	ction	Current Estimate	SAR Baseline Prod Est	Current APB Production Objective	Current Estimate
RDT&E	1874.9	1874.9	2062.4	1859.3	1753.3	1753.3	1741.5
Procurement	4055.3	4055.3	4460.8	437.3	4547.0	4547.0	458.1
Flyaway	3602.3			80.3	4043.4		81.2
Recurring	3602.3			80.3	4043.4		81.2
Non Recurring	0.0			0.0	0.0		0.0
Support	453.0			357.0	503.6		376.9
Other Support	362.9			354.0	402.4		373.9
Initial Spares	90.1			3.0	101.2		3.0
MILCON	0.0	0.0		0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0		0.0	0.0	0.0	0.0
Total	5930.2	5930.2	N/A	2296.6	6300.3	6300.3	2199.6

Confidence Levels for Current Acquisition Program Baseline Cost: The Independent Cost Estimate to support the C-130 AMP Milestone C decision in March 2010, like all life-cycle cost estimates previously performed by the Cost Assessment and Program Evaluation, is built upon a product-oriented work breakdown structure, based on historical actual cost information to the maximum extent possible, and, most importantly, based on conservative assumptions that are consistent with actual demonstrated contractor and government performance for a series of acquisition programs in which the Department has been successful.

It is difficult to calculate mathematically the precise confidence levels associated with life-cycle cost estimates prepared for Major Defense Acquisition Programs. Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

In December 2011, the Program Office Estimate assessed both the development and production programs as relatively low risk: the C-130 AMP has entered Low Rate Initial Production with little technology risk, all technology readiness ratings seven or higher, and the requirements well defined.

Quantity	SAR Baseline Prod Est	Current APB Production	Current Estimate
RDT&E	3	3	3
Procurement	218	218	6
Total	221	221	9

The unit of measure is a modified aircraft.

Cost and Funding

Funding Summary

Appropriation and Quantity Summary FY2013 President's Budget / December 2011 SAR (TY\$ M)

Appropriation	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
RDT&E	1735.0	6.5	0.0	0.0	0.0	0.0	0.0	0.0	1741.5
Procurement	250.0	208.1	0.0	0.0	0.0	0.0	0.0	0.0	458.1
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2013 Total	1985.0	214.6	0.0	0.0	0.0	0.0	0.0	0.0	2199.6
PB 2012 Total	2100.8	260.1	267.1	372.8	557.2	699.5	739.1	1459.1	6455.7
Delta	-115.8	-45.5	-267.1	-372.8	-557.2	-699.5	-739.1	-1459.1	-4256.1

The FY 2013 President's Budget cancelled C-130 AMP.

Quantity	Undistributed	Prior	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	To Complete	Total
Development	3	0	0	0	0	0	0	0	0	3
Production	0	6	0	0	0	0	0	0	0	6
PB 2013 Total	3	6	0	0	0	0	0	0	0	9
PB 2012 Total	3	10	8	8	20	32	39	39	62	221
Delta	0	-4	-8	-8	-20	-32	-39	-39	-62	-212

Cost and Funding

Annual Funding By Appropriation

Annual Funding TY\$

0400 | RDT&E | Research, Development, Test, and Evaluation, Defense-Wide

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2001							6.7
2002							13.0
2003							49.1
2004							62.4
2005							65.3
2006							61.4
Subtotal			-				257.9

Annual Funding BY\$
0400 | RDT&E | Research, Development, Test, and Evaluation, Defense-Wide

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 \$M	Non End Item Recurring Flyaway BY 2010 \$M	Non Recurring Flyaway BY 2010 \$M	Total Flyaway BY 2010 \$M	Total Support BY 2010 \$M	Total Program BY 2010 \$M
2001							7.9
2002							15.1
2003							56.3
2004							69.9
2005							71.1
2006							64.9
Subtotal							285.2

Annual Funding TY\$
3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
1999							1.7
2000							8.6
2001							60.3
2002							49.2
2003							122.7
2004							111.8
2005							155.9
2006							248.5
2007							182.4
2008							229.8
2009							161.8
2010							102.3
2011							42.1
2012							6.5
Subtotal	3				-		1483.6

Annual Funding BY\$
3600 | RDT&E | Research, Development, Test, and Evaluation, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 \$M	Non End Item Recurring Flyaway BY 2010 \$M	Non Recurring Flyaway BY 2010 \$M	Total Flyaway BY 2010 \$M	Total Support BY 2010 \$M	Total Program BY 2010 \$M
1999							2.1
2000							10.3
2001							71.1
2002							57.4
2003							141.1
2004							125.5
2005							170.6
2006							264.0
2007							188.8
2008							233.1
2009							162.0
2010							101.1
2011							40.8
2012							6.2
Subtotal	3						1574.1

Annual Funding TY\$ 3010 | Procurement | Aircraft Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway TY \$M	Non End Item Recurring Flyaway TY \$M	Non Recurring Flyaway TY \$M	Total Flyaway TY \$M	Total Support TY \$M	Total Program TY \$M
2008	2	19.3			19.3	1.9	21.2
2009	4	61.9			61.9	69.7	131.6
2010							
2011						97.2	97.2
2012						208.1	208.1
Subtotal	6	81.2			81.2	376.9	458.1

Annual Funding BY\$

3010 | Procurement | Aircraft Procurement, Air Force

Fiscal Year	Quantity	End Item Recurring Flyaway BY 2010 \$M	Non End Item Recurring Flyaway BY 2010 \$M	Non Recurring Flyaway BY 2010 \$M	Total Flyaway BY 2010 \$M	Total Support BY 2010 \$M	Total Program BY 2010 \$M
2008	2	19.3			19.3	1.9	21.2
2009	4	61.0			61.0	68.6	129.6
2010							
2011						92.3	92.3
2012						194.2	194.2
Subtotal	6	80.3			80.3	357.0	437.3

Low Rate Initial Production

	Initial LRIP Decision	Current Total LRIP
Approval Date	7/27/2001	2/13/2012
Approved Quantity	50	2
Reference	M/S B ADM	2013 President's Budget
Start Year	2005	2008
End Year	2014	2012

The first of two current Lot 1 LRIP aircraft (AMP #4) completed installation at Robins Air Force Base and delivered to Little Rock Air Force Base for Initial Operational Test & Evaluation (IOT&E) start in January 2012. The second (AMP #5) is scheduled for installation completion and delivery in March 2012. C-130 AMP IOT&E has been indefinitely postponed.

Quantity of 2 Current Total LRIP Approved exceeds 10% of total production quantity of 6 due to decrease of 212 aircraft from 218 in the FY 2013 President's Budget .

Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Memo
Sweden	1/31/2005	8	99.9	On July 1, 2009 Sweden's Defense Materiel Administration sent an informal notification to the Assistant Secretary of the Air Force for International Affairs (SAF/IA) that the program had been canceled. The Program Office telephoned Boeing Long Beach in July 2009 to alert them of informal notification. The Program Office received a formal letter via SAF/IA in July 2009 and issued the termination letter to Boeing Long Beach in August 2009. Boeing issued a Termination Settlement Proposal in June 2010 in amount of \$25M. Settlement negotiations are still ongoing.

Nuclear Cost

None

Unit Cost

Unit Cost Report

	BY2010 \$M	BY2010 \$M	
Unit Cost	Current UCR Baseline (APR 2010 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	5930.2	2296.6	
Quantity	221	9	
Unit Cost	26.833	255.178	+850.99 ¹
Average Procurement Unit Cost (APU)			
Cost	4055.3	437.3	
Quantity	218	6	
Unit Cost	18.602	72.883	+291.80 ¹
	BY2010 \$M	BY2010 \$M	
Unit Cost	Revised Original UCR Baseline (FEB 2008 APB)	Current Estimate (DEC 2011 SAR)	BY % Change
Program Acquisition Unit Cost (PAUC)			
Cost	5610.8	2296.6	
Quantity	222	9	
Unit Cost	25.274	255.178	+909.65 ¹
Average Procurement Unit Cost (APU)	C)		
Cost	3510.2	437.3	
Quantity	219	6	
Unit Cost	16.028	72.883	+354.72 1
		TY \$M	
Unit Cost	Current UCR Baseline (APR 2010 APB)	Current Estimate (DEC 2011 SAR)	TY % Change
Program Acquisition Unit Cost (PAUC))		
Cost	6300.3	2199.6	
Unit Cost	28.508	244.400	+757.30
Average Procurement Unit Cost (APUC	•		
Cost	4547.0	458.1	
Unit Cost	20.858	76.350	+266.05

	TY \$M					
Unit Cost	Revised Original UCR Baseline (FEB 2008 APB)	Current Estimate (DEC 2011 SAR)	TY % Change			
Program Acquisition Unit Cost (PAUC)						
Cost	5910.1	2199.6				
Unit Cost	26.622	244.400	+818.04			
Average Procurement Unit Cost (APUC	C)					
Cost	3982.7	458.1				
Unit Cost	18.186	76.350	+319.83			

¹ Nunn-McCurdy Breach

The FY 2013 President's Budget cancelled C-130 AMP. The program is currently developing its cancellation plan.

Unit Cost Breach Data

Changes from Previous SAR	\$M/Qty.	Percent
PAUC (BY \$M)	255.178	+833.69
APUC (BY \$M)	72.883	+283.47
PAUC Quantity	9	0.00
PAUC (TY \$M)	244.400	+736.67
APUC (TY \$M)	76.350	+255.93
Initial SAR Information DEC 2001	BY2000 \$M	TY \$M
Program Acquisition Cost	333	3.9 3965.4

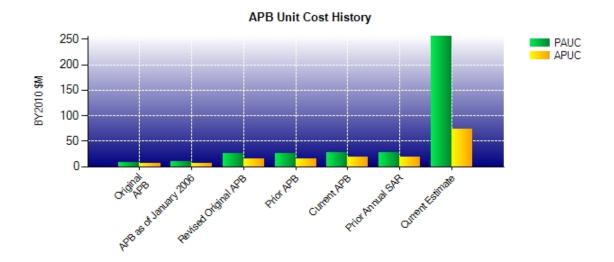
Unit Cost PAUC Changes

The FY 2013 President's Budget cancelled C-130 AMP.

Unit Cost APUC Changes

The FY 2013 President's Budget cancelled C-130 AMP.

Unit Cost History



		BY2010 \$M		TY \$M	
	Date	PAUC	APUC	PAUC	APUC
Original APB	JUL 2001	7.767	6.497	7.640	6.538
APB as of January 2006	MAR 2003	9.662	7.201	9.376	7.208
Revised Original APB	FEB 2008	25.274	16.028	26.622	18.186
Prior APB	FEB 2008	25.274	16.028	26.622	18.186
Current APB	APR 2010	26.833	18.602	28.508	20.858
Prior Annual SAR	DEC 2010	27.330	19.006	29.211	21.451
Current Estimate	DEC 2011	255.178	72.883	244.400	76.350

SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial PAUC		Changes							
Dev Est	Econ	Econ Qty Sch Eng Est Oth Spt Total						Prod Est	
7.640	-1.393	5.276	1.385	0.351	13.620	0.000	1.629	20.868	28.508

Current SAR Baseline to Current Estimate (TY \$M)

PAUC	PAUC										
Prod Est	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Est		
28.508	7.744	238.670	-5.989	0.722	-10.433	0.000	-14.822	215.892	244.400		

Initial SAR Baseline to Current SAR Baseline (TY \$M)

Initial APUC		Changes							
Dev Est	Econ Qty Sch Eng Est Oth Spt Total P					Prod Est			
6.538	-1.455	3.351	0.858	0.000	9.915	0.000	1.651	14.320	20.858

Current SAR Baseline to Current Estimate (TY \$M)

APUC			APUC								
Prod Est	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	Current Est		
20.858	10.800	87.692	-12.233	0.000	-8.533	0.000	-22.233	55.492	76.350		

SAR Baseline History

Item/Event	SAR Planning Estimate (PE)	SAR Development Estimate (DE)	SAR Production Estimate (PdE)	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	N/A	JUL 2001	JUL 2001
Milestone C	N/A	JAN 2007	MAR 2010	JUN 2010
IOC	N/A	N/A	N/A	N/A
Total Cost (TY \$M)	N/A	3965.4	6300.3	2199.6
Total Quantity	N/A	519	221	9
Prog. Acq. Unit Cost (PAUC)	N/A	7.640	28.508	244.400

Cost Variance

Cost Variance Summary

Summary Then Year \$M										
	RDT&E	Proc	MILCON	Total						
SAR Baseline (Prod Est)	1753.3	4547.0		6300.3						
Previous Changes										
Economic	+3.1	-5.2		-2.1						
Quantity										
Schedule	+19.5	+60.9		+80.4						
Engineering	+6.5			+6.5						
Estimating	-3.1	+40.2		+37.1						
Other										
Support		+33.5		+33.5						
Subtotal	+26.0	+129.4		+155.4						
Current Changes										
Economic	+1.8	+70.0		+71.8						
Quantity		-3895.7		-3895.7						
Schedule		-134.3		-134.3						
Engineering										
Estimating	-39.6	-91.4		-131.0						
Other										
Support		-166.9		-166.9						
Subtotal	-37.8	-4218.3		-4256.1						
Total Changes	-11.8	-4088.9		-4100.7						
CE - Cost Variance	1741.5	458.1		2199.6						
CE - Cost & Funding	1741.5	458.1		2199.6						

	Summary Base Year 2010 \$M										
	RDT&E	Proc	MILCON	Total							
SAR Baseline (Prod Est)	1874.9	4055.3		5930.2							
Previous Changes											
Economic											
Quantity											
Schedule	+18.4	+17.7		+36.1							
Engineering	+6.5			+6.5							
Estimating	-3.1	+34.8		+31.7							
Other											
Support		+35.4		+35.4							
Subtotal	+21.8	+87.9		+109.7							
Current Changes											
Economic											
Quantity		-3384.5		-3384.5							
Schedule		-112.1		-112.1							
Engineering											
Estimating	-37.4	-77.9		-115.3							
Other											
Support		-131.4		-131.4							
Subtotal	-37.4	-3705.9		-3743.3							
Total Changes	-15.6	-3618.0		-3633.6							
CE - Cost Variance	1859.3	437.3		2296.6							
CE - Cost & Funding	1859.3	437.3		2296.6							

Previous Estimate: December 2010

RDT&E	\$1	Λ
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	+1.8
Decrease due to Air Force withholds for higher priority programs. (Estimating)	-18.4	-19.4
Decrease due to program cancellation of funding in FY 2013 President's Budget. (Estimating)	-17.5	-18.7
Adjustment for current and prior escalation. (Estimating)	-1.5	-1.5
RDT&E Subtotal	-37.4	-37.8

Procurement	\$N	/1
	Base	Then
Current Change Explanations	Year	Year
Revised escalation indices. (Economic)	N/A	+70.0
Total Quantity variance resulting from a decrease of 212 aircraft from 218 to 6. (Subtotal)	-3734.9	-4305.7
Quantity variance resulting from a decrease of 212 aircraft from 218 to 6. (Quantity)	(-3548.8)	(-4085.5)
Allocation to Schedule resulting from Quantity change. (Schedule) (QR)	(-112.1)	(-132.8)
Allocation to Estimating resulting from Quantity change. (Estimating) (QR)	(-74.0)	(-87.4)
Additional Quantity variance resulting from Quantity change due to cancellation. (Quantity)	+164.3	+189.8
Decrease in Schedule variance due to rephasing of Low Rate Initial Production (LRIP) procurement. (Schedule) (QR)	0.0	-1.5
Adjustment for current and prior escalation. (Estimating)	-3.9	-4.0
Decrease in Other Support due to rephasing of LRIP procurement. (Support) (QR)	-26.5	-46.2
Adjustment for current and prior escalation. (Support)	-1.5	-1.7
Decrease in Initial Spares resulting from Quantity change due to cancellation. (Support)	-103.4	-119.0
Procurement Subtotal	-3705.9	-4218.3

(QR) Quantity Related

Contracts

Appropriation: RDT&E

Contract Name
C-130 AMP (LRIP)
Contractor
THE BOEING COMPANY
Contractor Location
2401 E. WARDLOW RD

LONG BEACH, CA 90807-5309

Contract Number, Type FA8625-08-C-6481, FFP

Award Date September 30, 2008
Definitization Date March 02, 2010

Initial Co	ntract Price	(\$M)	Current C	ontract Price	(\$M)	Estimated Price At Completion (\$M)		
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor Program Manager		
36.7	N/A	. 2	172.3	N/A	6	172.3	172.3	

Cost And Schedule Variance Explanations

Cost and Schedule variance reporting is not required on this FFP contract.

Contract Comments

The difference between the initial contract price target and the current contract price target is due to Contract modifications

Delivered Quantity under Contract Deliveries means AMP kits from Boeing. The first Low Rate Initial Production aircraft (AMP #4) delivered to Little Rock Air Force Base on January 3, 2012. The second (AMP #5) is completing its installation modification at Warner Robins Air Logistics Center with an estimated delivery during March 2012.

Deliveries and Expenditures

Deliveries To Date	Plan To Date	Actual To Date	Total Quantity	Percent Delivered
Development	3	3	3	100.00%
Production	2	1	6	16.67%
Total Program Quantities Delivered	5	4	9	44.44%

Expenditures and Appropriations (TY \$M)				
Total Acquisition Cost	2199.6	Years Appropriated	14	
Expenditures To Date	1733.4	Percent Years Appropriated	100.00%	
Percent Expended	78.81%	Appropriated to Date	2199.6	
Total Funding Years	14	Percent Appropriated	100.00%	

Operating and Support Cost

Assumptions And Ground Rules

The Table below does not include Unit-Level Manpower since it represents a savings for C-130 AMP of \$172.6K (Base Year 2010) per aircraft per year. Therefore, the Total Unitized O&S Cost (Base Year 2010) equals \$71.6K for a steady state period. Total O&S costs also include ramp up and ramp down costs that would not be in the steady state per unit cost. Therefore, the product of per unit aircraft cost, number of aircraft, and steady state period will not equal the total O&S costs Costs shown are deltas to the existing O&S costs for the C-130 Combat Delivery fleet of 221 aircraft.

C-130 AMP O&S Program Office Estimate provided December 2011 by Aeronautical Systems Center Financial Management.

Unit Cost Breakout (BY)

The Table below does not include Unit-Level Manpower since it represents a savings for C-130 AMP of \$172.6K (Base Year 2010\$) per aircraft per year. Therefore, the Total Unitized O&S Cost (Base Year 2010\$) equals \$71.6K.

Each aircraft in inventory 20 years; total Life Cycle FY 2010 - FY 2042

There is no antecedent system for this modernization.

Costs BY2010 \$K				
Cost Element	C-130 AMP Annual Cost Per Aircraft	No Antecedent		
Unit-Level Manpower				
Unit Operations	172.2			
Maintenance				
Sustaining Support	70.9			
Continuing System Improvements				
Indirect Support	1.2			
Other				
Total Unitized Cost (Base Year 2010 \$)	244.3			

Total O&S Costs \$M	C-130 AMP	No Antecedent
Base Year	496.5	
Then Year	561.9	

C-130 AMP O&S estimate update provided December 2011 by Aeronautical System Center Financial Management.